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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,965	08/19/2006	Christophe Dumousseaux	09354.0009	9332

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EXAMINER	
SOROUSH, LAYLA	
ART UNIT	PAPER NUMBER
1627	

MAIL DATE	DELIVERY MODE
11/25/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,965	DUMOUSSEAUX ET AL.	
	Examiner	Art Unit	
	LAYLA SOROUSH	1627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 12-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 12-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The response filed July 13, 2009 presents remarks and arguments submitted to the office action mailed April 14, 2009 is herein acknowledged.

Applicant's arguments over the 35 U.S.C. 103(a) rejection of claims 1-5, 7-10, and 12-14 over Kadokura et al. (EP 268 938) in view of Hall et al. (US 20020009564 A1), and Mongiat et al. (US 7,101,536 – previously presented) is not persuasive. Therefore, the rejection is herewith maintained.

Applicant's arguments over the 35 U.S.C. 103(a) rejection of claim 6 over Kadokura et al. (EP 268 938) and Mongiat et al. (US 7,101,536 – previously presented), as applied to claims1-5, 7-13 and 14 above, and further in view of Reinehr et al. (WO 01/43714) is not persuasive. Therefore, the rejection is herewith maintained.

The rejections of record are restated below for Applicant's convenience:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7-10, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadokura et al. (EP 268 938 – previously presented) in view of Hall et al. (US 20020009564 A1), and Mongiat et al. (US 7,101,536 – previously presented).

Kadokura et al. teach cosmetic compositions such as make-up formulations comprising a lamina comprising a matrix substance (e.g. silicon dioxide) and a finely divided metal or metal compound dispersed therein (e.g. titanium dioxide, zinc oxide, silver powder, etc.). See p. 2, lines 36-45, 56-58; p. 3, lines 1-49; p. 5, lines 25-29; p. 9, Example 10. The average thickness of the lamina is 0.1-5 microns, the average size is 1-500 microns and the aspect ratio is 3-100. See p. 4, line 53 – p. 5, line 5. The lamina of Kadokura are calcined at ranges between 300 C to 700 C. The same silicon base porous particles are taught therefore, the property of "aspect ratio" claimed is met by the teachings of the prior art.

Hall et al. is solely used to show that silicone particles calcined at about 300 C to about 400 C, produce porous particles (col 3 lines 25-40).

Kadokura et al. does not teach the spherical powder of Claim 12.

However, Mongiat et al. teach using spherical powders of the instant claims as SPF enhancers in UV protective compositions. See col. 31, lines 40-47. An additional beneficial effect provided by some spherical powders is a soft feel during spreading and skin mattifying. See col. 31, lines 50-55.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the UV protective compositions of Kadokura et al. such that to use spherical powders. One having ordinary skill in the art would have been motivated to do this to obtain better UV protection as well as to improve the skin feel and mattifying properties of cosmetic formulations as suggested by Mongiat et al.

With respect to Claim 7, the reference teaches. nanoparticles of metal or metal compounds such as silver powder, titanium dioxide and other substance, dispersed within the matrix particles (see above), but does not explicitly teach the claimed "combination of silver nanoparticles and titanium dioxide nanoparticles". However, making a combination of the disclosed compounds is obvious modification of the prior art and within the skill of the ordinary practitioner. One having ordinary skill in the art would have been motivated to do this to obtain the desired UV screening ability of the lamina.

With respect to Claim 10, the reference does not teach the claimed oil absorbability of the particles. However, since the particles of Kadokura et al. are porous and are used in skin care formulations such as face powder and foundations, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to adjust the oil absorbability of the particles. One having ordinary skill in the art would have been motivated to do this to obtain a mattifying effect of the formulations.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadokura et al. (EP 268 938) and Mongiat et al. (US 7,101,536 – previously presented), as applied to claims1-5, 7-13 and 14 above, and further in view of Reinehr et al. (WO 01/43714).

Kadokura et al. and Mongiat et al. are as applied above.

Kadokura et al. and Mongiat et al. do not teach the fluorescent substances of Claim 6.

However, Reinehr et al. teach using fluorescent substances of the instant claim in UV protecting skin care compositions. See Abstract; pp. 1-11. The fluorescent substances are used to lighten the skin, to protect the skin against UV radiation and to improve the appearance of cosmetic formulations. See pp. 1, 17.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the particles of Kadokura et al. such that to use fluorescent substances in addition to or instead of metal oxides dispersed in the matrix. One having ordinary skill in the art would have been motivated to do this to obtain UV protective and skin lightening effect as well as to improve the appearance of cosmetic formulations as suggested by Reinehr et al.

Response to Arguments

Applicant's arguments filed on July 13, 2009 have been considered but are not persuasive.

Applicant argues the Kadokura discloses a laminar substance used as a matrix and silicon as an example of a laminar substance but does not teach an optically active substance incorporated therein. However, the reference clearly states the titanium dioxde and zinc oxide (optically active substances) are dispersed within the matrix substance. Therefore, the argument that the laminar substances are not porous is not persuasive.

With respect to the argument that Hall relates to silicones and not silica the Examiner's contention is that the reference was solely used to show that the lamina of Kadokura are calcined at ranges between 300 C to 700 C and Hall teaches that the

silicon particles calcined at about 300 C to about 400 C, produce porous particles (col 3 lines 25-40).

Lastly, Applicant argues the individual references Hall, Mongiat and Reinehr do not teach "porous silica particles having an aspect ratio of at least 2, and ... an optically active substance incorporated into said porous particles." In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner states that Hall et al. is solely used to show that silicone particles calcined at about 300 C to about 400 C, produce porous particles (col 3 lines 25-40); Mongiat et al. was solely relied upon due to the teaching that spherical powders of the instant claims as SPF enhancers in UV protective compositions. See col. 31, lines 40-47. An additional beneficial effect provided by some spherical powders is a soft feel during spreading and skin mattifying. See col. 31, lines 50-55.; and Reinehr et al. teach using fluorescent substances of the instant claim in UV protecting skin care compositions. See Abstract; pp. 1-11. The fluorescent substances are used to lighten the skin, to protect the skin against UV radiation and to improve the appearance of cosmetic formulations. See pp. 1, 17. It would have been *prima facie* obvious to one having ordinary skill in the art at the time

the invention was made to modify the particles of Kadokura et al. such that to use fluorescent substances in addition to or instead of metal oxides dispersed in the matrix. One having ordinary skill in the art would have been motivated to do this to obtain UV protective and skin lightening effect as well as to improve the appearance of cosmetic formulations as suggested by Reinehr et al.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Soroush whose telephone number is (571)272-5008. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627